

# Artificial Intelligence (AI)

The broad field of creating machines that simulate human intelligence and perform tasks like reasoning, learning, and problem-solving.

## Machine Learning (ML)

A subset of AI focused on building algorithms that enable systems to learn from data and improve their performance over time without explicit programming.

## Deep Learning (DL)

A subset of ML that uses neural networks with many layers to model complex patterns in data, particularly for tasks like image recognition and natural language processing.

## Data Science (DS)

The interdisciplinary field that combines statistics, data analysis, and machine learning to extract insights and knowledge from structured and unstructured data.

